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Chronic CAD/Stable Ischemic Heart Disease

PROGNOSIS OF VASOSPASTIC ANGINA PATIENTS WHO SURVIVED CARDIAC ARREST: DOES IMPLANTABLE CARDIOVERTER-DEFIBRILLATORS HAVE AN IMPACT?

ACC Moderated Poster Contributions
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Session Title: Non-Obstructive CAD: What Are We Missing?
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Background: It remains unclear whether implantable cardioverter defibrillator (ICD) improves prognosis of vasospastic angina (VSA) patients who survived cardiac arrest. In this study, we examined the effects of medical treatment and ICD on prognosis of resuscitated-VSA patients.

Methods: Between 1985 and 2011, 31 patients who survived cardiac arrest (25 males, and 6 females; mean age 55±10 years) were diagnosed to have VSA by use of the Guidelines of the Japanese Circulation Society for diagnosis of VSA. Two patients who could not be followed up were excluded from the analysis. The primary end point was sudden cardiac death (SCD) or appropriate ICD shocks.

Results: Spontaneous VSA was documented in 25 patients and the other 4 patients were diagnosed by positive provocation tests. Eight patients had treated with calcium channel blockers (CCBs) and/or nitrates at the onset of cardiac arrest. Fourteen patients were received ICD, but 15 patients rejected ICD implantation. Twenty-eight patients (97%) were treated with CCBs, and 21 patients (72%) with nitrates and/or nicorandil at discharge. They were followed up for 69±82 months. In Kaplan-Meire curve for ICD shocks or SCD, the five-year event free survive rate was 66.6%. Five (38%) of the ICD- implanted patients received appropriate ICD shocks for ventricular fibrillation/tachycardia associated with VSA attack, and there were 3 SCD events (20%) in the patients without ICD. No patients with ICD died during the follow up period. There was no significant difference in the medication for VSA between 8 patients with ICD shocks or SCD and the others. Cox's proportional hazards model indicated that sex, smoking, more than two vasodilators, statin, and past history of spontaneous attack were not significantly associated with ICD shocks or SCD.

Conclusion: In VSA patients with a history of cardiac arrest, risk stratification cannot be made by usual clinical characteristics and response to medications. ICD therapy appears to have benefit for prevention of SCD in this group of patients.